Fig 1


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 67  GTG TCA ACC TGG TTG ATA CGT AGT GGT GAA CCT GTG CAA CAC CGC ACT GAA TTC CCG TTC
127  ATC GCA TTC TTA ACG ACA GAG AGA ACA ATG TGT ACA GGT TCA CTA GTC TCA ACG AGA GCA
187  GTA CTC ACA GCT GGT CAT TGT GTT TGC TCA CCA TTG CCA GTG ATT CGG gtaagagatcgactg
250  aaacacattgttgctcaatgtaatcgattgatttcacagacagtgtttgcgtgtgcgtgcgtttgtgtttgtgtatgca
329  gtgggtttgcatagattttaatgtctatatacttggtcttattttcag GTT TCA TTT CTC ACA CTG AGG AAT
400  GGC GAC CAA CAA GGC ATC CAT CAC CAA CCG TCT GGA GTT AAG GTG GCA CCA GGA TAC ATG
460  CCC TCT TGT ATG TCG GCA CGA CAG AGG AGA CCA ATC GCA CAG ACA CTC AGT GGA TTC GAT
520  ATT GCA ATT GTA ATG CTG GCT CAA ATG GTC AAC TTA CAG AGT GGA ATC AGA GTG ATC AGT
580  CTG CCA CAG CCA TCG GAT ATC CCG CCA CCT GGA ACT GGT GTT TTC ATT GTT GGT TAT GGA
640  AGG GAT GAT AAC GAC CGT GAT CCG TCA CGT AAG AAT GGT GGA ATA TTG AAG AAA gtgagtt
701  gttggtgaataaacgacatgactcagtcgtcagtcagatgtcagtcagttattctgtgtgtctgtgtatctgtttgtgt
780  gtctgtctgtctacctgatccggttgttgtattggtcagagccttgataataacaactgtgtttggatgactttgtgac
859  agttcagtagcagagtgatttccatctcggtcattgtgttggtgaggtgaggtgacgtgatgtgaggtgagttgaggtta
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1096 gtgacttgatcgtcgaatatagtgcacatgtgattgtatgtggactattgttgtgtgggtagtgtgaagggtggatatt
1175 gtgccagttgatattttcgaaattcacttgtgtgttttgttttgttccgttgtgttttgttctttctcatctgtactgt
1254 acgttgttgtactgtactgttgttgtggttgtttgtttgcaccacag GGT CGA GCG ACT ATA ATG GAA TGC
1325 CGA CAT GCG ACC AAT GGC AAT CCT ATA TGT GTG AAA GCA GGT CAG AAT TTC GGA CAG TTA
1385 CCC GCT CCA GGT GAC AGT GGT GGA CCT CTC CTC CCA TCC CTT CAA GGT CCA GTA CTC GGT
1445 GTC GTA TCA CAT GGT GTC ACA CTG CCA AAC CTT CCC GAT ATC ATT GTC GAG TAT GCC AGT
1505 GTG GCT AGA ATG TTG GAT TTT GTA CGC TCC AAT ATT TGA
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Fig. 1. Consensus sequence of 3 PCR clones of *Schistosoma mansoni* cercarial elastase gene. Nucleotide numbers correspond to the open reading frame of the cDNA sequence reported by Newport *et al.* (1988). The 2 introns are shown in lower case text. Splice signal and branch formation sequences are shown in underlined text.

Figure 2 - Production of Construct pGEXCEL

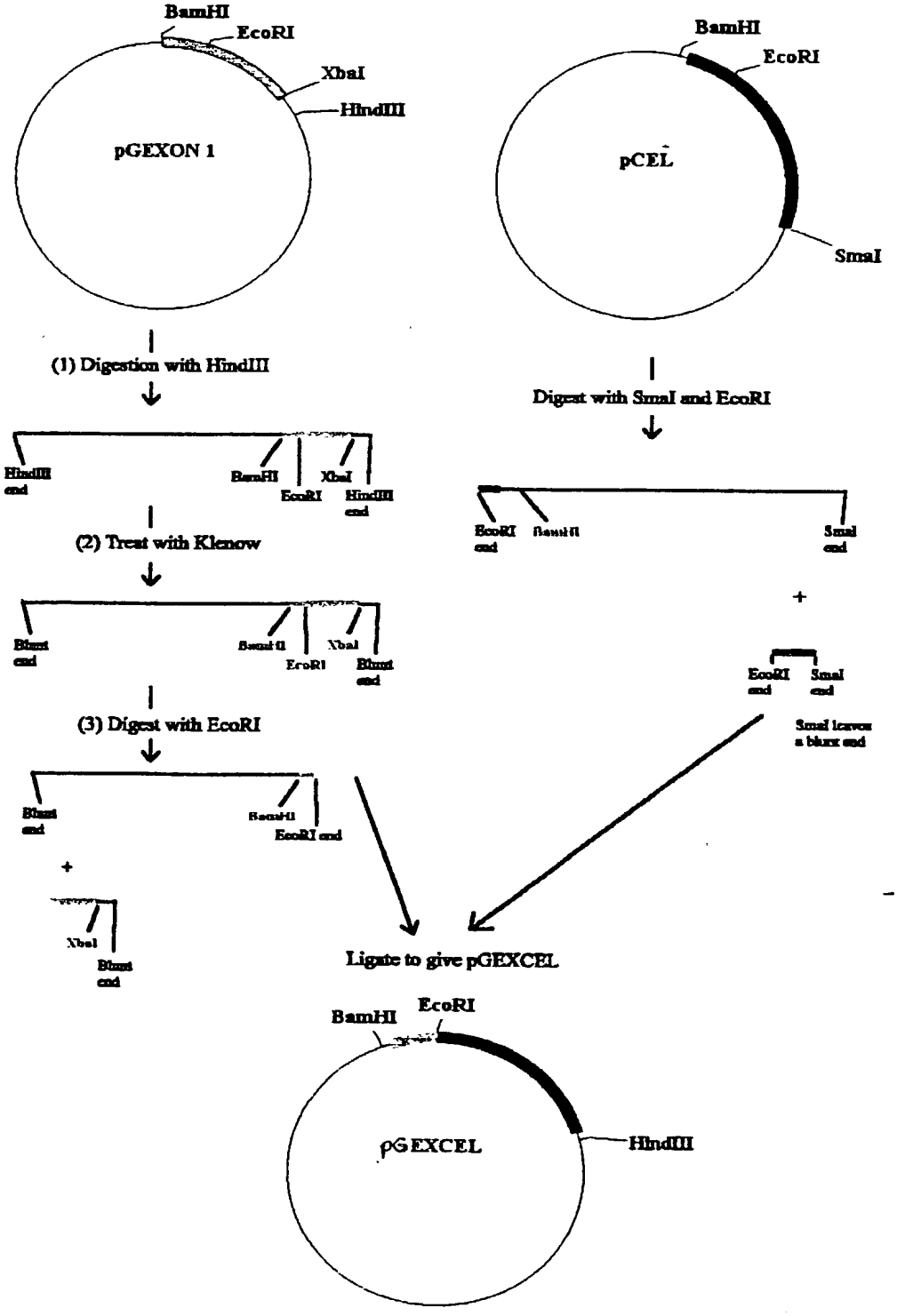
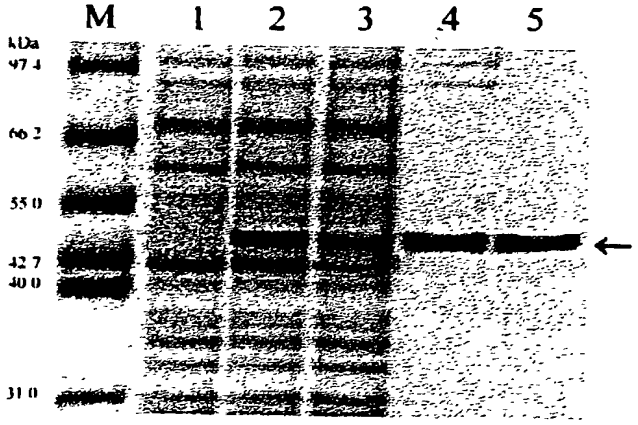


Figure 3 - SDS-PAGE Showing Purification of the Recombinant Protein Sm30-GST

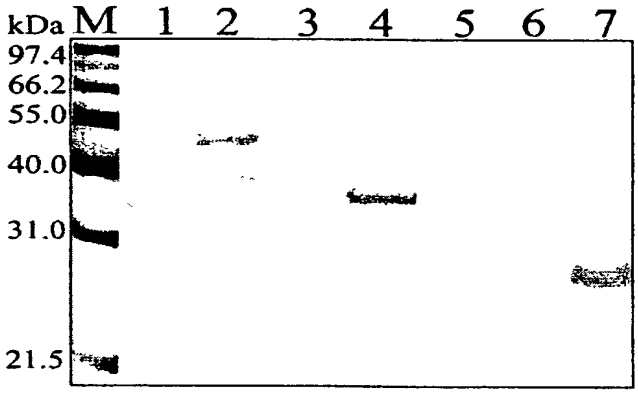


M = Protein Mid-Range Molecular Weight Markers
1 = Total proteins from uninduced *E. coli* carrying plasmid pGEXCEL
2 = Total proteins from IPTG-induced *E. coli* carrying pGEXCEL, grown at 30°C
3 = Soluble lysate of IPTG-induced *E. coli* as in lane 2
4 = Fraction containing Sm30-GST following ion-exchange chromatography
5 = Fraction containing Sm30-GST following gel filtration

The recombinant protein Sm30-GST is indicated by "←"

Figure 4:

Western immunoblot showing antibody reactivity of serum from rabbit immunized with Sm30-GST.

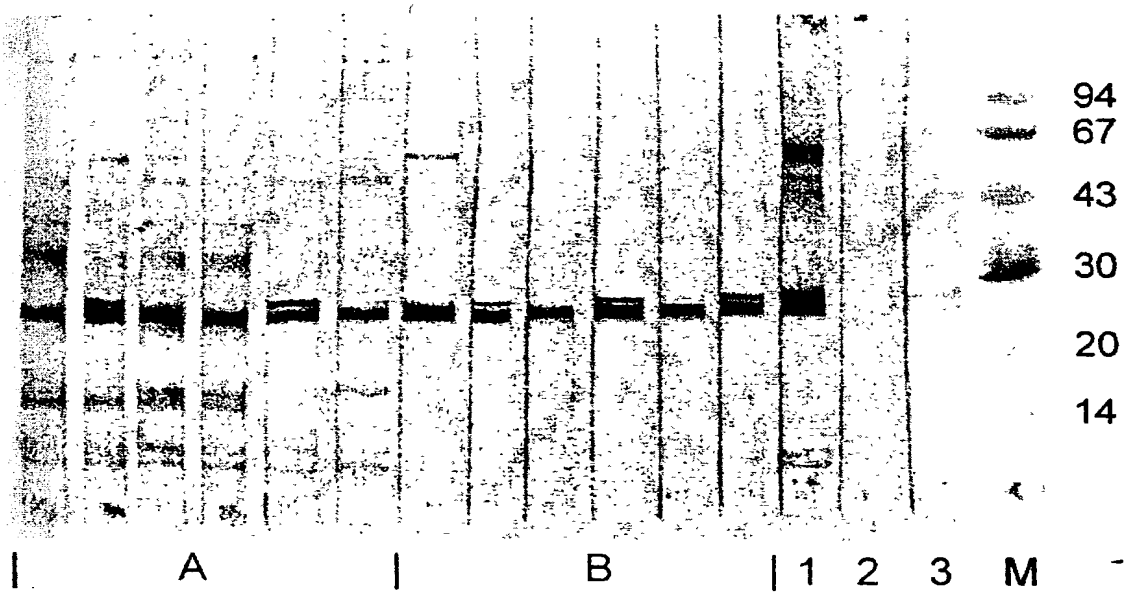


Antigens in lanes:

1. Horse albumin
2. Recombinant fusion protein Sm30-GST
3. " " " Sm30Ex1-GST
4. " " " Sm30Ex2-GST
5. " " " Sm30Ex3-GST
6. Recombinant Sj26GST
7. *S. mansoni* cercarial transformation fluid (CTF)

Figure 5

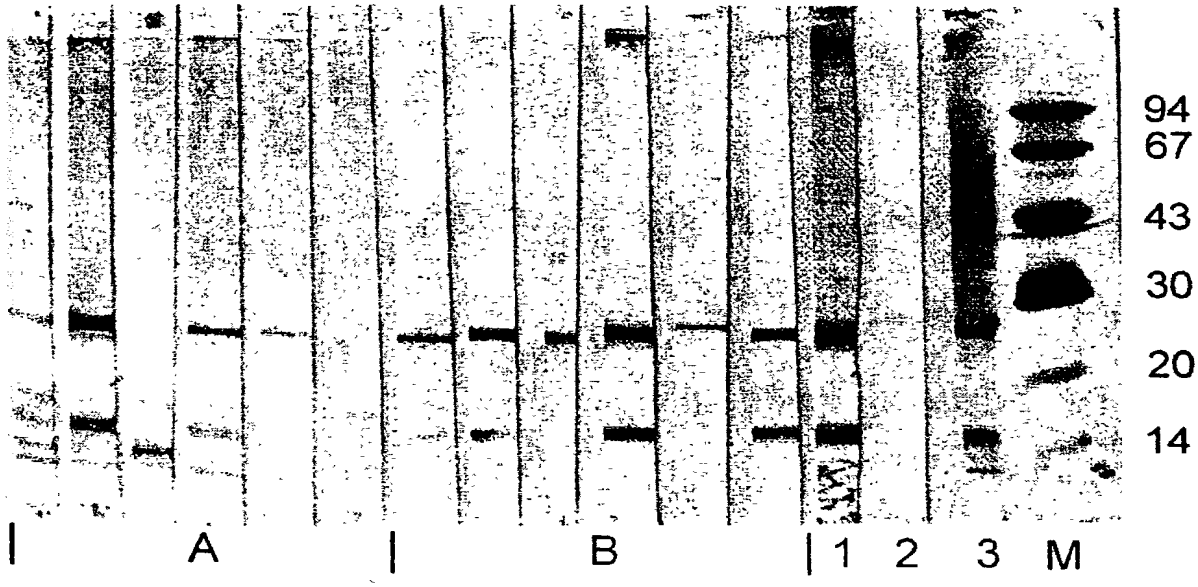
Reactivity of sera from immunized mice against *S. mansoni* cercarial antigens.



A = sera from 6 mice immunized with *S. mansoni* CTF
B = sera from 6 mice immunized with Sm30-GST
1 = serum from rabbit BR67
2 = normal rabbit serum
3 = larval antigens stained with protogold
M = molecular weight standards

Figure 6

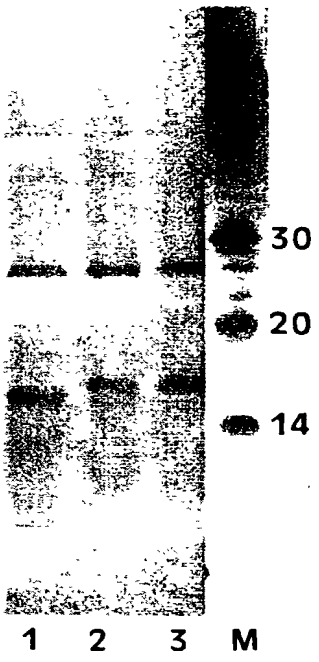
Reactivity of sera from immunized mice against *S. haematobium* cercarial antigens.



A = sera from 6 mice immunized with *S. mansoni* CTF
B = sera from 6 mice immunized with Sm30-GST
1 = serum from rabbit BR67
2 = normal rabbit serum
3 = larval antigens stained with protogold
M = molecular weight standards

Figure 7:

Cross-reactivity of antibodies raised against *S. haematobium* 27kDa larval protease against antigens of *S. mansoni* and *S. margrebowiei*.



Antigens in lanes:

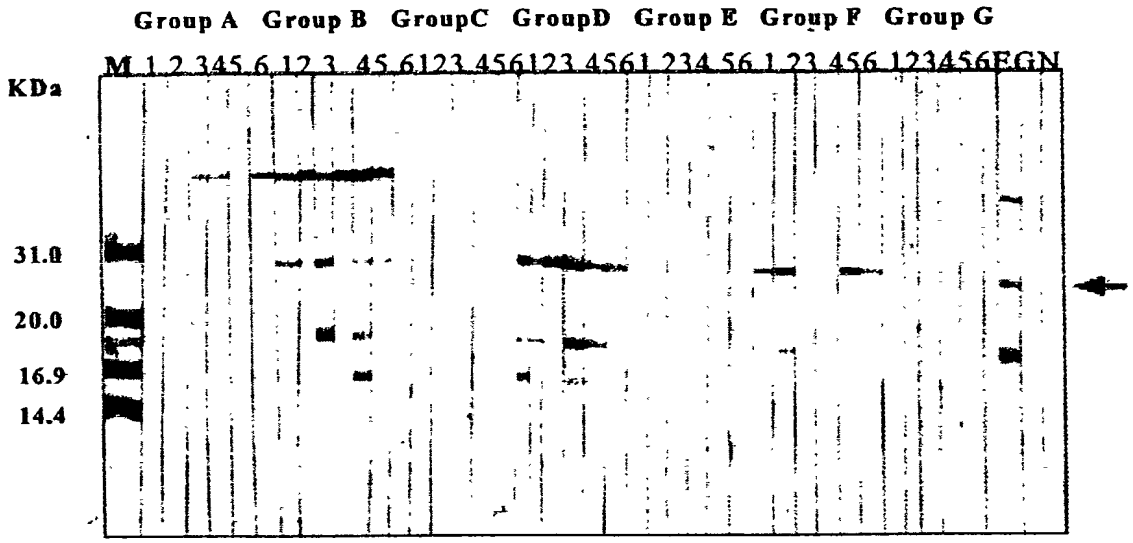
1. *S. mansoni* cercarial antigens
2. *S. haematobium* cercarial antigens
3. *S. margrebowiei* cercarial antigens

M = molecular weight standards (kDa)

Rabbit antiserum used to probe antigens in lanes 1-3 was raised against the 27kDa *S. haematobium* larval protease using the same methods as for BR67, the anti-*S. mansoni* 27kDa larval protease antiserum.

Figure 8:

Antibody reactivity of mice immunized with recombinant fusion proteins against *S. mansoni* cercarial transformation fluid (CTF).



Group	Immunogen
A	Alum and PBS alone (control mice).
B	CTF.
C	Recombinant Sj26.
D	Recombinant Sm30-GST.
E	Recombinant Sm30Ex1-GST
F	Recombinant Sm30Ex2-GST
G	Recomvinant Sm30Ex3-GST

Control Sera

E = Rabbit serum BR67 (anti-27kDa *S. mansoni* larval protease)
G = Rabbit serum 1093X (anti-*S. japonicum* GST)
N = Normal rabbit serum

M = Molecular weight markers.

M =